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Biennial Report to the President of the United States

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Federal Agency Implementation of Executive Order 12962 - Recreational Fisheries

Highlights of Accomplishments For
Fiscal Years 1996–1997

Prepared By National Recreational Fisheries
Coordination Council, Washington, DC

98-032115/NF

NATIONAL RECREATIONAL FISHERIES COORDINATION COUNCIL

On June 7, 1995, President Clinton signed Executive Order 12962 (Order)–Recreational Fisheries to improve the quality, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities nationwide. In addition to specifying Federal agency duties, the Order established a National Recreational Fisheries Coordination Council co-chaired by the Secretary of the Interior and the Secretary of Commerce, set time lines for adoption of a Recreational Fishery Resources Conservation Plan (Conservation Plan), expanded the role of the Sport Fishing and Boating Partnership Council, and required the development of a joint policy by the National Marine Fisheries Service and the U.S. Fish & Wildlife Service for administering the Endangered Species Act of 1973. The Executive Order also stipulated that a biennial report of accomplishments of the Conservation Plan be prepared.

In addition to the completion of the Recreational Fishery Resources Conservation Plan by the National Recreational Fisheries Coordination Council in 1996, each of the agencies signatory to the plan developed and implemented individual agency plans during 1997. This report highlights some of the accomplishments of the Federal agencies in implementing both their individual plans and, collectively, the Conservation Plan during fiscal years 1993 and 1997.

As the representatives designated by the Secretary of Commerce and the Secretary of the Interior to co-chair the National Recreational Fisheries Coordination Council, we are pleased to provide this report to the President on the accomplishments of the Federal agencies towards fulfilling the directive of Executive Order 12962 to conserve, restore, and enhance aquatic systems and fish populations and to provide for increased recreational fishing opportunities for all Americans.

John Rogers
Deputy Director
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Executive Summary

Recreational fisheries are an integral component of our national heritage and continue to play an important role in the social, cultural, and economic well-being of our Nation. We must strengthen our efforts in order to conserve, restore, and enhance aquatic systems to provide for increased recreational fishing opportunities nationwide.

The key to accomplishing this task is through strong partnerships among Federal, State, and Tribal governments, private land managers, and the recreational fishing community. This Biennial Report to the President of the United States, Federal Agency Implementation of Executive Order 12962—Recreational Fisheries Highlights of Accomplishments for Fiscal Years 1996–1997—provides a summary of Federal agency accomplish-ments towards achieving these goals. It fulfills the requirements under Section 2(d) of Executive Order 12962 to prepare a biennial report of accomplishments of the Conservation Plan.

The Biennial Report describes the many diverse contributions the Federal government makes to recreational fishing. Some agencies directly support recreational fishing by providing boat ramps, bank and shoreline fishing areas, parking, and fish cleaning stations on their lands. Others help assure that there are fish to catch by stocking hatchery fish or by providing scientific information to determine when and how many fish anglers can take. Others focus on reducing the pollution that enters our nation's streams, rivers, lakes, and coasts, keeping them healthy for fish and for people. Many agencies provide education opportunities to help people learn how to fish, to stay in touch with the natural world, to understand why a clean environment is important and what they can do to keep it clean, and to fish and boat safely.

Each of the Federal agencies signatory to the Conservation Plan and represented on the National Recreational Fisheries Coordination Council provided information and assisted in the preparation of this Biennial Report. The report also summarizes the specific accomplishments of USFWS and NMFS in implementing the Joint Recreational Fishing/ Endangered Species Act (ESA) Policy required under Section 4 of the Order.

The following abbreviations are used throughout this report:

ACE	Army Corps of Engineers
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
BPA	Bonneville Power Administration
DOC	Department of Commerce
DOD	Department of Defense
ESA	Endangered Species Act
FERC	Federal Energy Regulatory Commission
IAFWA	International Association of Fish and Wildlife Agencies
MOU	Memorandum of Understanding
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRFCC	National Recreational Fisheries Coordination Council
SWPA	Southwest Power Administration
TVA	Tennessee Valley Authority
USFS	U.S. Forest Service
EPA	U.S. Environmental Protection Agency
USAF	U.S. Air Force
USA	U.S. Army
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
USFWS	U.S. Fish & Wildlife Service
USN	U.S. Navy

Success Indicators

Recreational fishing provides significant social, cultural, and economic benefits to the American society, and is the second most popular form of outdoor recreation in the United States (with swimming being first). Recreational fishing is enjoyed by people of all ages and from all walks of life. Particularly for children, recreational fishing provides an introduction to the environment and an opportunity to develop an appreciation for natural resources.

Recreational fishing also contributes significantly to the nation's economy. The following Success Indicators were derived from: 1) 1996 National Survey of Fishing, Hunting, and Wildlife Associated Recreation, conducted by the USFWS and the Bureau of the Census; 2) EPA's National Water Quality Inventory: 1996 Report to Congress; 3) EPA's 1996 National Listing of Fish Consumption Advisories; and 4) NMFS's Status of U.S. Living Marine Resources.

- Anglers fished 626 million days in 1996[1] representing a 23% increase in fishing activity from the 511 million days fished in 1991.

- Freshwater fishing totaled 515 million recreational angler days in 1996.

- Saltwater fishing totaled 103 million recreational angler days in 1996.

- 17 percent of the U.S. population (aged 16 and older) fished in 1996 representing a 2 percent decline from the 1991 census.

- 29,935,533 recreational fishing license holders in 1996 purchased 37,864,650 licenses, tags, permits and stamps, providing nearly $447 million in revenues to the States.

- In 1996, 64% of the miles of rivers and streams surveyed, 61% of the acres of lakes and reservoirs surveyed, and 62% of the square miles of estuaries surveyed supported healthy aquatic life.

[1] The number of recreational angler days differs from the sum of freshwater and saltwater days because of survey design.

- 15% of the nation's total lake acres and 5% of the nation's total river miles are under fish consumption advisories.

- 100% of the Great Lakes waters and their connecting waters and a large portion of the nation's coastal waters are under fish consumption advisories.

- The rate of wetland loss has been reduced by nearly 37% from 458,000 acres per year during the 1950's–1970's to about 290,000 acres per year in the 1980's.

- There were 56 overutilized, 70 fully-utilized, 31 underutilized, and 44 marine stocks of unknown utilization in Federal waters.

- 5,094 facilities were constructed or maintained to enhance recreational fishing opportunities.

A Note About Agency Outputs

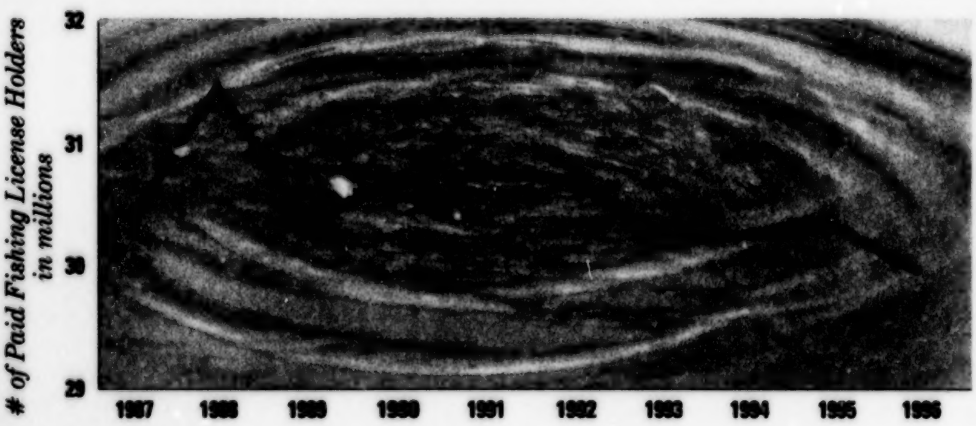
Because of the varying missions of Federal agencies some of the outputs listed in the Conservation Plan are not applicable to all agencies. For example, agencies that do not manage or assist others in managing lands and waters can not report on acres of flat water and miles of streams restored, areas opened to public fishing, or access improved. Nor would it be applicable for agencies that do not manage or assist others in managing fish to report on the number of fishable populations established.

Agencies that manage Federal lands and waters, or that assist private landowners on a volunteer basis, do not necessarily have data collection systems in place that mirror the core and supplemental agency outputs listed in the Conservation Plan. Consequently, agencies have reported accomplishments using their own unique outputs that support the Conservation Plan. The NRFCC recognizes that a more uniform reporting of outputs is desirable and is working toward this goal.

S P O T L I G H T

The NRFCC and its State and private partners developed the concept of recreational fishery roundtables (stakeholder meetings at the State level) to capture near-term, on-the-ground opportunities to improve recreational fisheries. Preliminary roundtables were held successfully in Arkansas and Maryland. Results were discussed with the IAFWA and were well-received. The IAFWA is considering a resolution recommending that recreational fishery roundtables be held in other States.

Ten-Year Trend in Number of Paid Fishing License Holders (in millions)



Anglers fished 626 million days in 1996

Specific Agency Accomplishments

This section provides details of Federal agencies' accomplishments for fiscal years 1996 and 1997. All four of the Conservation Plan's strategies are addressed below, and three levels of reporting are available for each strategy: (1) the measurable agency outputs described on pages 7-10 and on page 16 of the Conservation Plan, (2) where appropriate, additional measurable outputs, and (3) significant non-measurable accomplishments.

Additional Measurable Outputs are agency(ies) activities which can be quantified, yet are not specified in the Conservation Plan. Significant Non-Measurable Accomplishments are agency(ies) activities important to increasing recreational fishing opportunities yet cannot be directly quantified. While the Measurable Agency Outputs are listed in the Conservation Plan and provided in this report, only selected material is listed under Additional Measurable Outputs and Significant Non-Measurable Accomplishments.

In-depth information for these categories can be obtained from the individual agencies.

STRATEGY 1
Outputs for Fish and Their Habitats

A. Measurable Agency Outputs

Restored 338,301 acres of surface water (BLM, USFS, NRCS, EPA, TVA, BIA, USA, USAF, and USN).

Restored 3,992 miles of stream habitat (USFWS, BLM, NPS, USFS, ACE, TVA, BIA, and FERC).

Opened 17,439 acres of flat water for fish migration (USFS, BLM, and TVA).

Restored 480,364 acres of riparian habitat (TVA, BLM, NMFS, BIA, USFS, and NRCS).

Opened 7,798 miles and 3,990,660 acres for anadromous fish migration (ACE, EPA and NMFS).

S P O T L I G H T

Recreational fisheries activities within the USFWS received a boost in 1996 and 1997 by implementation of the "Fisheries Across America" program with the National Fish and Wildlife Foundation. Twenty-one projects totaling $1,021,365 were completed to protect, conserve, and restore native fish populations. These projects provided for the restoration of 4,386 acres of riparian habitat and 66 stream miles.

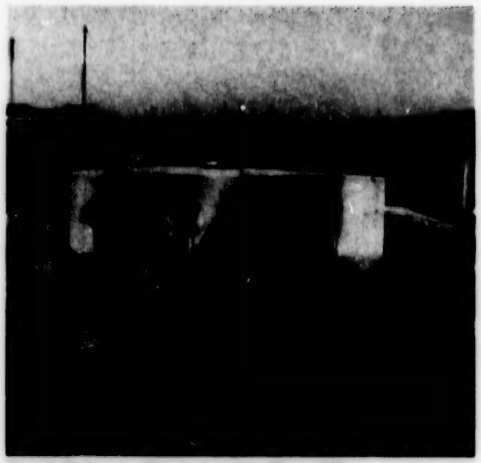
B. Additional Measurable Agency Outputs

Improved water quality on 3,840,000 acres of surface water (ACE and NRCS).

Improved 33,500 acres of surface water and 22,800 miles of streams to meet State water quality standards (NRCS and ACE).

Restored 962,013 acres of wetland (ACE, NMFS, NRCS, and USFWS).

Produced and distributed 127 million fish for restoration or mitigation in FY 1997, and distributed nearly 56 million rainbow, brown, cutthroat and lake trout eggs to Federal, State, and Tribal partners—all directly benefitting recreational anglers (USFWS and BPA).



Denil Fishway, Chickahominy River, VA

Saltwater fishing provided 193 million angler days in 1996

Provided stewardship of fishery resources on 656 million acres of Federal land (DOD, USFWS, BLM, USFS, ACE, and NPS). Provided 464,000 additional acre-feet of water for fish (BOR).

Secured 24,057 acre-feet of water rights to protect or restore fisheries (EPA and BLM).

National Resources Inventory (NRCS) reports soil erosion declined by 1.4 billion tons between 1982–1997.

In 1996, to determine whether water bodies fully supported aquatic life, States and Tribes surveyed: 693,305 miles of rivers and streams; 16,818,769 acres of lakes (excluding Great Lakes); 28,829 square miles of estuarine waters; and, 3, 651 miles of ocean shoreline (excluding Alaska) (EPA).

C. Significant Non-Measurable Accomplishments

In fiscal year 1997, the USFWS received $1.5 million to mount a major initiative to begin addressing the impacts of whirling disease. Activities included coordinated research aimed at developing non-lethal detection methods to identify parasites in fish and worm hosts, fish strain susceptibility studies, studies examining the biological response of fish to the parasite, and establishment of a National Partnership on Management of Wild and Native Cold Water Fisheries.

Scientists with USGS and universities have developed a System Integration and Analysis Model for the Klamath River in California to evaluate alternative reservoir release schedules that will assist in restoration of Pacific salmon populations.

SWPA facilities at Bull Shoals and Norfork in Arkansas and Tenkiller Ferry in Oklahoma were modified to aspirate more atmospheric air during times of generation. Modifications included the installation of turbine hub baffles, modification of the turbine vacuum system and cutting of additional air openings in the headcovers of the units. These modifications provided increased downstream dissolved oxygen levels at full power output. The maximum recommended generation rates were larger and the duration of time the rate limits were in place was shorter.

S P O T L I G H T

Since 1990, the USFWS, NRCS, BLM, USFS, EPA, and USGS have worked with private landowners, ranchers, conservation organizations and State resource managers to improve native fish populations in the middle portion of the Blackfoot River ecosystem in Montana. Currently, conservation easements provide perpetual protection on over 40,000 acres of riparian areas, wetlands, grasslands and timbered areas; use of Best Management Practices to improve grazing has reduced physical damage to streams; water conservation measures have improved stream flows; over 1,500 acres of wetlands have been restored; removing barriers to fish migration has reconnected almost 200 miles of stream; and screens on irrigation canals have reduced entrainment of juvenile fish. These cooperative actions have increased trout populations several-fold in some river stretches, especially native cutthroat and bull trout.

Fighting chair allows for bluewater excitement

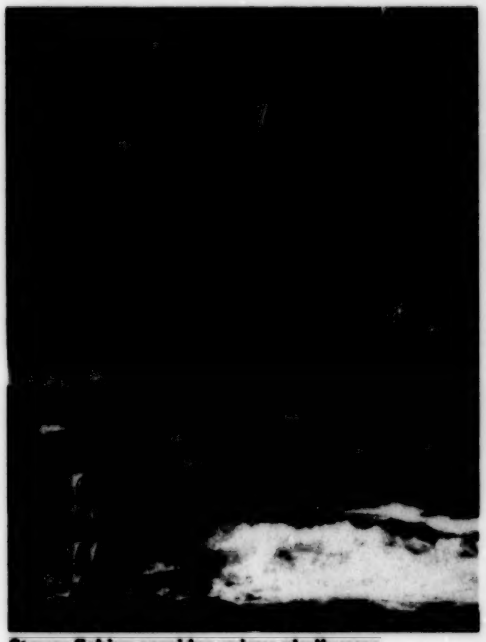
The Massachusetts Bay National Estuary Program, funded by EPA, spearheaded an interagency effort to restore 12 recreational and commercial shellfish beds in communities along the Massachusetts coast. Restoration projects are focused on identifying pollutant sources, such as storm water runoff. Approximately 300 acres of shellfish beds re-opened in the North River, and 200 acres re-opened in the Back River watershed.

BOR constructed a temperature-control device on the water supply intake at Shasta Dam in California to preserve the cold water pool on the Sacramento River for the benefit of downstream cold water fish. This $80 million device will enable endangered winter run chinook salmon to coexist with full power production at Shasta Dam.

NPS is leading one of the largest habitat restoration projects ever attempted. Two large dams on the Elwha River will be removed and access for 30 miles of salmon spawning habitat restored in Olympic National Park. The final Environmental Impact Statement for the Elwha River Ecosystem and Restoration Project was released in November 1997. The USGS, in cooperation with the Lower Elwha Klallam Tribal Council which has treaty fishing rights, is assisting these efforts by evaluating the current ecological status and nutrient dynamics of the Elwha River.

BOR rehabilitated and improved the fish passage structure at Marble Bluff Dam in Nevada to provide passage for the endangered Cui-ui and threatened Lahontan cutthroat trout.

BIA assisted Tribes in improving 356 acres of surface water and 30 miles of river and stream by stopping the illegal dumping of sewage into surface waters.



Stream fishing provides unique challenges

S P O T L I G H T

In FY 1997, FERC issued 71 licenses for the operation of non-Federal hydropower projects. These licenses contain provisions for protecting and enhancing fisheries habitats and/or providing recreational fishing opportunities. In 46 of the 71 licenses issued, flows were either restored or initiated in over 58 miles of bypassed reaches, (i.e., between the dam and the powerhouse). At 9 of these 46 projects, the mode of operation was further converted from a peaking mode to provide a more natural flow to protect aquatic habitats and resources from flow fluctuations.

BOR has conducted an Anadromous Fish Screen Program since 1994 in conjunction with the California Department of Fish and Game, USFWS, and other CalFed Bay-Delta program participants in the Central Valley to protect juvenile anadromous fish from unscreened or inadequately screened water diversion points.

S P O T L I G H T

Twelve million dollars of EPA Clean Water Act State Revolving Funds will be used in conjunction with $12 million from US Department of Interior to increase flows in the Truckee River in Nevada by purchasing water rights from willing sellers. This is a landmark agreement and a first of its kind use of clean water loans to purchase water for instream flows to support aquatic life. The estimated amount of water to be purchased through this agreement is 24,000 acre-feet. Expected benefits include improved fish spawning conditions, recruitment of riparian vegetation, reduction in water temperatures, increases in dissolved oxygen concentrations, and reductions in non-point source loadings. Improved habitat for Lahontan cutthroat trout, as well as other trout species, is expected to substantially enhance recreational fishing opportunities in the river.

NPS and USFWS are working with the State of Arkansas to restore a self-sustaining population of channel catfish to reaches of the Buffalo National River. The project is supported in part by a grant from the American Sportfishing Association.

EPA and ACE partnered with the National Fish and Wildlife Foundation, NMFS, USFWS, and the North Carolina Marine Fisheries Commission to jointly fund the removal of the 260-foot long Quaker Neck Dam on the Neuse River near Goldsboro, North Carolina. Demolition of the dam will allow better passage for anadromous species such as striped bass, American shad, hickory shad and shortnose sturgeon to a 75-mile stretch of the Neuse River and 925 miles of its tributaries. The dam is being voluntarily removed by Carolina Power & Light.

BPA implemented a Northern Squawfish Management Program designed to reduce predation of salmonids by northern squawfish and ultimately improve salmonid survival at mainstem hydro-electric power generating facilities. Northern squawfish were removed through a sport reward fishery, a dam-angling fishery, and site-specific gill net fisheries. In 1997, anglers removed 120,000 northern squawfish and expended 27,000 angler days of fishing effort. This project also employed a fishing instructor who conducted 33 public fishing clinics coordinated through local port districts and area bait and tackle shops.

TVA enhanced protection of wetlands, cultural resources, and sensitive natural resources along more than 25% of 11,000 miles of reservoir shoreline and developed plans to ensure the proper use and stewardship of approximately 34,000 acres of reservoir land.

S P O T L I G H T

The biodiversity and abundance of fish and other life has steadily increased below all 16 dams in TVA's Lake Improvement Plan as a result of the continuous improvement in dissolved oxygen and minimum flows. Fish communities are rebounding and fishing has increased. For example, fishing in the 12 mile long tailwater below South Holston Dam has increased from 60,000 hours per year in 1991 to 125,000 hours per year in 1997, and 55 percent of the 1997 fish were wild fish.

BPA managed 49 anadromous and resident fish production projects in 1997, totaling $20,114,988 in appropriations. Specific activities included construction of a largemouth bass hatchery located on the Kalispel Indian Reservation, operation and maintenance of numerous hatcheries, purchase of fish for Mt. View and Sheep Creek Reservoirs in Nevada, and design work for a number of facilities.

S P O T L I G H T

Sixty species/species complexes of interest to recreational anglers are being restored and/or conserved through fishery management plans prepared by Regional Fishery Management Councils. These plans are approved and implemented by NMFS, under the authority of the Magnuson-Stevens Act; and by interstate marine fisheries commissions, their member States, NMFS and USFWS under authorities such as the Atlantic Coastal Fisheries Cooperative Management Act, and the Atlantic Striped Bass Conservation Act.

$12,564,051 of NMFS's base funding was awarded to States, researchers, interstate marine fisheries commissions, and industry to gather biological, statistical, socio-economic, habitat, hooking mortality, regulatory, migratory, catch and release, stocking, and marking information on recreational species such as bluefin tuna, striped bass, weakfish, summer flounder, sharks, winter flounder, marlin, salmon, halibut, small mouth bass, yellow perch, red snapper, American shad, and Spanish mackerel.

In 1997, NMFS staff began identifying, describing, and mapping critical reef fish habitats in the eastern Gulf of Mexico for future potential recreational fishing reserve sites.

USGS has developed the first rapid identification method for determining the sex of chinook salmon using only non-lethal tissue sampling. This technology allows managers of remnant salmon runs to provide an optimum sex ratio for captive rearing efforts.

Through 1997, more than 140,000 sharks of 40 different species were tagged and released under the NMFS Cooperative Shark Tagging Program.

USGS provided tools to detect the effects of endocrine disrupting chemicals in fish populations. Models were developed to assess the risk of these chemicals to fish populations of the Columbia River ecosystem.

Federal agencies and their partners are working to restore wild salmon populations in the Pacific Northwest

EPA's Chesapeake Bay Program Office, in partnership with NMFS, USFWS, NPS and State and local parties, opened 78 miles of river to both migratory and anadromous fishes following the removal of dams and installation of fish ladders and elevators.

STRATEGY 2
Outputs for Facilities and Access

A. Measurable Agency Outputs

Federal agencies constructed or maintained 5,202 facilities to enhance recreational fishing opportunities (BOR, BIA, USFWS, BLM, NPS, USFS, NRCS, ACE, USFS, and TVA).

B. Additional Measurable Agency Outputs

Recreational fishing opportunities were provided on 702 Federal facilities (BOR, USFWS, and NPS).

Federal lands provided 194,399,990 days of recreational fishing in 1997 (USN, USFWS, BOR, NPS, USFS, BPA, ACE, and USA).

Federal lands provide 3,308,920 acres of lakes and ponds and 51,060 miles of stream for recreational fishing (USA, BOR, NPS, and USN).

Administration of the Watershed Protection Program (P.L. 566) provides for 80,066 acres of lakes for recreational fishing (NRCS).

S P O T L I G H T

The USFS improved recreational fishing opportunities on National Forests by constructing or restoring 96 boat ramps, parking areas, fishing piers, docks, or fish cleaning stations in 1997. These projects collectively provide a 13,300 increase in angler capacity at Forest Service facilities.

C. Significant Non-Measurable Accomplishments

The USN at Patuxent Naval Air Station planted 50,000 American beachgrass plants and 28 rows of panic grass in an effort to stabilize the beach at Fishing Point. The Station also stabilized nearly 3,000 feet of shoreline along the Chesapeake Bay which had been eroded by heavy fishing use. In addition, lights were installed at a popular fishing pier using funds gained from the sale of fishing permits.

FERC approved 35 recreation plans in 1997 and 8 additional plans in 1998. Implementation of these 43 approved recreation plans will provide for one or more fishing piers/platforms at 17 FERC-licensed projects, one or more boat launches at 20 projects, improved bank/shore fishing opportunities at 15 projects, fish cleaning stations at 2 projects, 12 canoe portages, improved camping facilities at 2 projects and development of brochures identifying the recreational facilities available at 3 projects.

S P O T L I G H T

ACE created 1,699 artificial underwater habitats, installed black bass spawning structures and catfish nesting boxes, and used submerged erosion control mats to improve aquatic habitats in reservoirs. These actions resulted in the improvement of 58 acres of shoreline, 4,133 acres of mud flats, and 148 stream and river miles. These actions represent a 400 % increase over 1996 in surface water acres improved and a 100 % increase in miles of river improved for fish migration.

Federal agencies constructed or maintained 5282 facilities in 1997 to enhance recreational fishing

New fishing piers at Lake Havasu were constructed by BLM for universal access, and existing facilities were upgraded to meet standards.

The National Wildlife Refuge System (USFWS) provided recreational fishing opportunities for 5.2 million people at 293 refuges. The wildlife-rich estuary of Florida's Ten Thousand Islands National Wildlife Refuge, one of the nation's newest refuges, provides great opportunities for red drum, snook, sea trout, and tarpon fishing. The Upper Mississippi National Wildlife Refuge stretches 220 miles through the States of Illinois, Iowa, and Wisconsin and provides opportunities for walleye, largemouth bass, perch, and other warmwater species. Another 1997 addition to the National Wildlife Refuge System, the Black Bayou Lake National Wildlife Refuge in Louisiana, provides fishing for largemouth bass, sunfish and crappie in a 1,600 acre oxbow lake.

Aquatic plant management and improved habitat provided an additional 90,000 fishing days at TVA reservoirs in 1997.

Tailwater fishing has increased as much as 20% per year at some TVA facilities due to the success in operational changes that increase minimum flows and dissolved oxygen. Reservoir fishing has been improved by stabilizing water levels, improving water quality, protecting shorelines, and managing aquatic plant populations.

STRATEGY 3
Outputs for Education and Support

A. Measurable Agency Outputs

1,231,795 individuals participated in fishing and aquatic education programs sponsored by Federal agencies (EPA, USCG, USFWS, BLM, USFS, NMFS, NRCS, ACE, BIA, and TVA).

11,074 National Fishing Week and similar fishing events were sponsored by Federal agencies (BPA, USFWS, BLM, BIA, NPS, USFS, NMFS, ACE, EPA, USCG, NRCS, and TVA).

Sharing knowledge and experience encourages young anglers

S P O T L I G H T

NMFS developed, funded, and implemented a tagging protocol workshop of organizational representatives from around the country (BOAT/U.S.; American Littoral Society; USFWS; Virginia Institute of Marine Science; Atlantic, Gulf and Pacific States Marine Fisheries Commissions; Geographic Modeling System Lab; Virginia Tech; Sea Grant; and the American Fisheries Society) to develop protocols for a national strategy to prevent private marine tagging programs from negatively impacting bona fide scientific tagging programs.

B. Additional Measurable Agency Outputs

Federal agencies invested $1,695,000 in aquatic environmental education activities. (NPS, BLM, TVA, BPA, NMFS, EPA, BOR and USFWS)

3,080,000 individuals received multimedia aquatic resource education and 1,668,000 individuals visited Federal agency aquatic education Internet sites (EPA, BLM, NMFS, USFWS, and USFS).

416,000 aquatic resource education publications were distributed to the public (USFWS, EPA).

Safe boating programs were provided to 125,584 participants (USAF, FERC, and TVA).

3,188 boating safety classes were held specifically for children (USCG).

151,282 courtesy marine safety examinations were performed (USCG).

$42.9 million was provided to states for recreational boating safety programs and $2.3 million was provided to non-profit organizations (USCG).

S P O T L I G H T

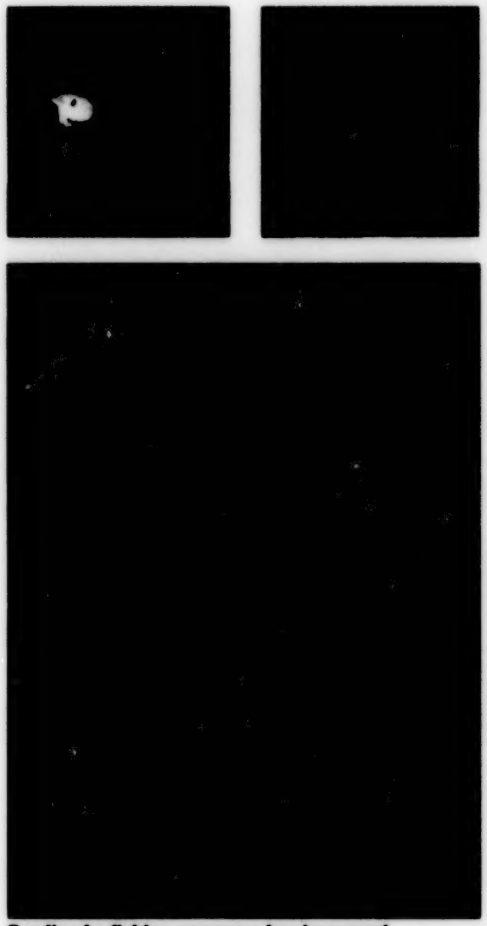
The Naval Surface Weapons Center was selected by the USN to sponsor a pilot DOD Fishing License Amnesty Day in 1997. In conjunction with the Indiana DNR and the USFWS, the Center sponsored a free fishing weekend for military personnel and the local community.

C. Significant Non-Measurable Accomplishments

1,393 children, disabled citizens, and non-traditional angling adults were introduced to marine recreational angling for the first time through a NMFS cost-sharing partnership program with States and private fishing clubs.

BOR supported Catch a Special Thrill (C.A.S.T.) and Take-A-Kid-Fishing events for underprivileged or disabled children. Events were held at Black Canyon Reservoir (ID), Lake Berryessa (CA), Millerton Lake (CA), Navajo Reservoir (NM), Henry Hagg and Prineville Reservoirs (OR), and at the Kids Day Fishing Derby at Folsom Reservoir (CA).

USGS held an Open House at its Virginia headquarters that attracted up to 22,000 visitors. Programs demonstrated how scientists determine the territories of fish, explained on-going research on declining Atlantic shortnose sturgeon, let children make impressions of a Chesapeake Bay fish, and showed a working model of how flumes allow fish passage at hydroelectric dams.



Funding for fishing programs has increased enjoyment for all ages, races and abilities

In 1997, EPA released the aquatic resources educational tool known as the Index of Watershed Indicators. This is the first comprehensive assessment of watersheds in the continental U.S. The data, now available to all citizens on the Internet, highlight which watersheds have good water quality, moderate water quality, more serious problems, and insufficient data to fully characterize watershed health.

NMFS has provided rods and reels to support the California Department of Fish and Game's Youth Fishing Club Program. The Program provides a vehicle to get approximately 300 minority children connected with the marine environment by sponsoring monthly fishing activities. Each activity includes a seminar on some aspect of marine conservation in addition to an opportunity to go fishing. NMFS has also provided rods and reels to the New York Sportfishing Federation in support of its "Take-A-Kid Fishing" Program.

Habitat improvement projects benefit both fish and anglers

STRATEGY 4
Outputs for Partnerships

A. Measurable Agency Outputs

2,823 conservation easements and/or agreements were administered with private landowners to improve fishery resources (NRCS, USFWS, BLM, USFS, and TVA).

2,549 partnership agreements were executed to increase recreational fishing opportunities on private lands (USFWS, BLM, NRCS, TVA, BIA, and USAF).

1,784 partnership projects were completed (NMFS, BLM, USFS, ACE, TVA,NCRS, and FERC)

Non-Federal partners provided $25 million in support of cooperative projects to improve fish and fishing (USFS, BLM, ACE, and TVA).

B. Additional Measurable Agency Outputs

Interjurisdictional Fishery Management Plans were developed for 209 fisheries (NMFS, USFWS, and NPS).

$156 million were provided to improve recreational fisheries (NPS, NMFS, and BPA).

$545 million in excise tax revenues were distributed to States under the Federal Aid in Sport Fish Restoration Program (Dingell-Johnson/Wallop-Breaux) in 1996 and 1997 (USFWS).

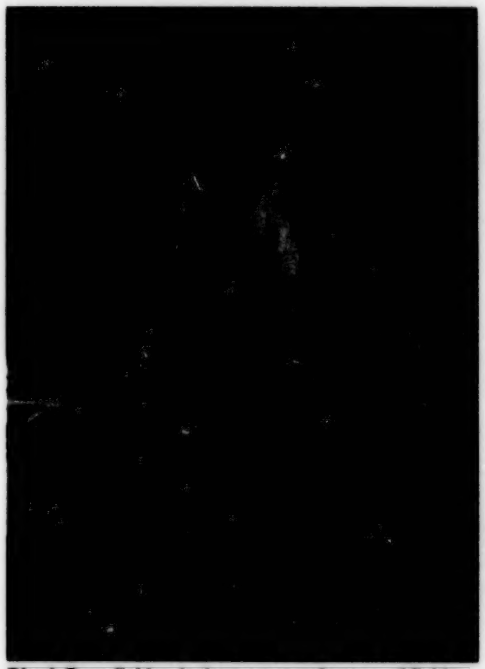
C. Significant Non-Measurable Accomplishments

In FY 1997, EPA, DOC, NRCS, USFS, NPS, ACE, and DOT helped shape a new Federal interagency partnership known as the American Heritage Rivers Initiative. EPA and its partners are working to focus the delivery of resources to support community-led efforts to protect natural resources and aquatic habitat while spurring economic revitalization and preserving historic and cultural heritage.

ACE established 349 partnership agreements in 1997 that resulted in more than $8.5 million in projects and activities. These activities included volunteer lake cleanups, marina grants, fish stockings, tournaments, the construction of piers and information kiosks, aquatic habitat improvement, and fishery research and development.

S P O T L I G H T

The USDA's Conservation Buffer Initiative is a large public and private partnership of Federal agencies, conservation groups, State agencies, conservation districts, environmental groups, and others working with agricultural industry corporations. They have designed or installed 200,000 miles of buffers. Federal agencies include NOAA, EPA, USDA, and USFWS. Private industries include Cargill, ConAgra, Farmland Industries, Monsanto, Novartis Crop Protection, Pioneer Hi-Bred International, and Terra Industries. Environmental groups and trade associations number over 75 and includeTrout Unlimited, B.A.S.S., Inc., IAWFA, the National Fish and Wildlife Foundation, The Nature Conservancy, American Farm Bureau Federation, Environmental Defense Fund, Izaak Walton League of America, National Association of Conservation Districts, National Corn Growers Association, National Rifle Association of America, Society of American Foresters, and Water Environment Federation.



Black Bass fishing is the most popular type of fishing in the U.S.

S P O T L I G H T

The NPS developed a Cooperative Watershed Management Plan with the Pennsylvania Fish and Boat Commission to manage the wild trout fishery in Valley Creek within Valley Forge National Park. The NPS and Fish Commission developed partnerships with local governments and conservation groups to develop a comprehensive stormwater management plan for the watershed.

Michigan Huron Pines RC&D Council (NRCS) has partnered with USFWS, Trout Unlimited, Michigan Flyfishing, Michigan DNR, and local Soil and Water Conservation Districts on the Upper Manistee River and AuSable River to enhance fishing access, curb streambank erosion, empty sandtraps, restore and replace instream structures and preserve habitat. As a result of these efforts, the 1997 angler census yielded the highest index observed for the trout fishery.

The *Multi-State Aquatic Resources Information System* (NRCS, USGS, USFS, USFWS) is using a centrally located server and homepage where participating States provide a core set of quantitative attributes characterizing the status of aquatic resources in each State. This information can be linked to physio-chemical and land use data bases to assess the potential impacts of land use policies. Potential benefits include analyses for targeting State and Federal programs to optimize the effects on identified fishery resources.

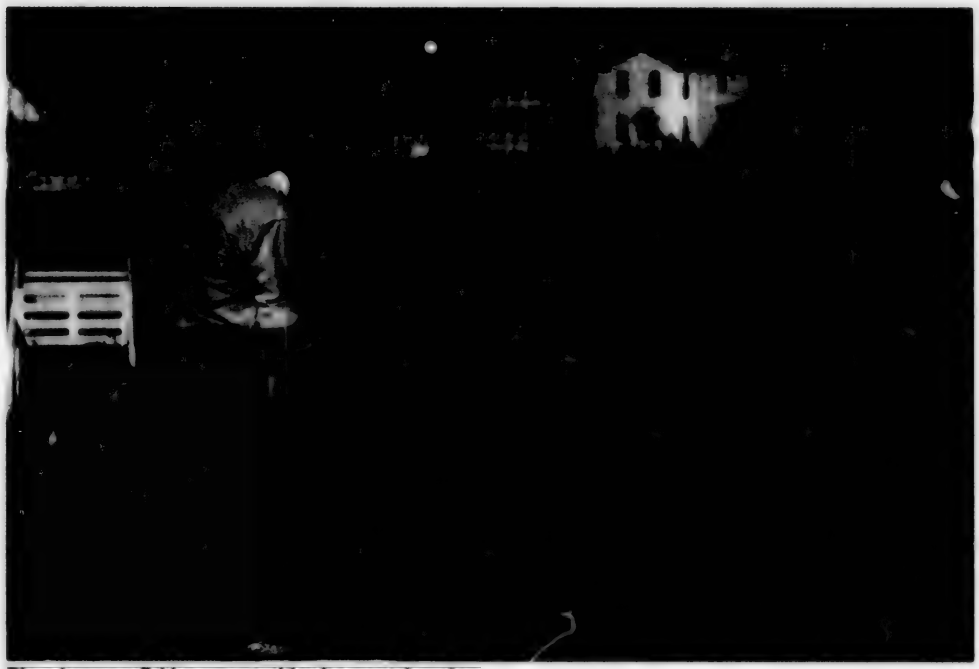
A NMFS and USFWS Interagency Personnel Agreement established obligations and procedures to support NMFS in its analysis of mass marking and selective fisheries for coho salmon. NMFS will provide $90,000 to fund an 18-month position to analyze the selective recreational harvest of marked hatchery fish and the impacts to wild fish populations.

NMFS initiated a MOU with BOAT/US to cooperate on volunteer tagging of near-shore recreationally important species such as striped bass, red drum, and tarpon.

BLM's National Riparian Team trained over 2,000 individuals, including private land owners, in the techniques needed to restore riparian areas.

S P O T L I G H T

The US Naval Academy (USN) is contributing to efforts with local government, the Horn Point Environmental Center, the Chesapeake Bay Foundation, and the Severn River Association to restore over 2 million oysters to the Old Fort oyster bar in the Severn River and juvenile oysters on Mill Creek. Oyster bars are important habitats for recreational fish.



Piers increase fishing opportunities for coastal anglers

The *Bring Back the Natives Initiative*, funded cooperatively among BLM, the National Fish and Wildlife Foundation, USFS, Trout Unlimited and others provided over $900,000 in funds for a variety of projects. Over $302,000 in BLM challenge cost-share funds were matched with over $600,000 in private contributions.

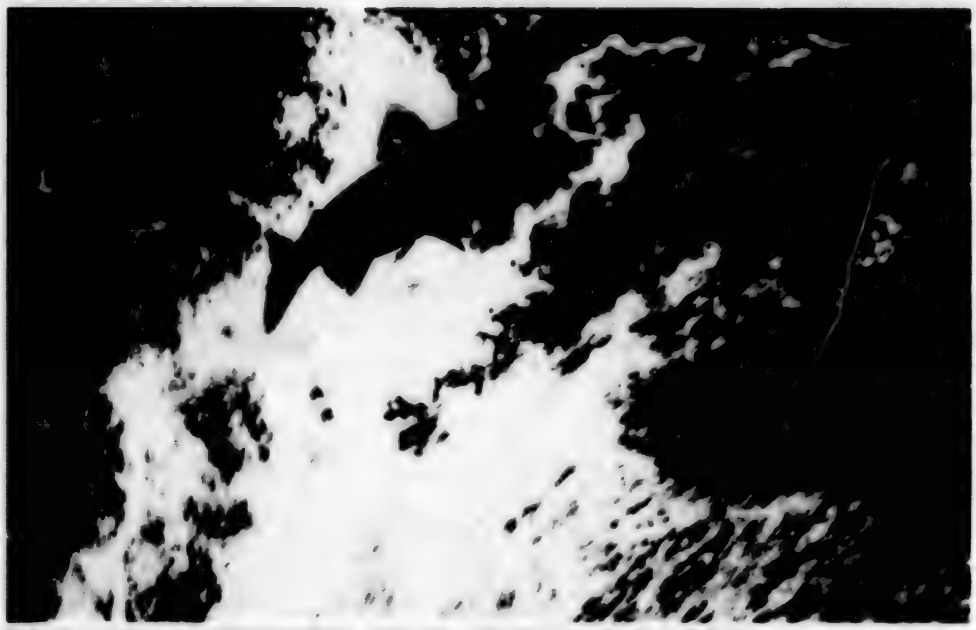
USGS sampled fish throughout the Mississippi River Basin and found that organochlorine insecticides and PCBs have declined substantially since 1986. These data, in conjunction with biomarker results, will be used to guide future research and regulatory activities on specific contaminants and assess consequences of remediation and regulatory actions.

S P O T L I G H T

From October 1996 to March 1997, the USFWS held 16 separate stakeholder meetings throughout the country. More than 430 people attended these meetings to improve communication, to help identify the appropriate roles and responsibilities of the Service in recreational fisheries, and to develop cooperative approaches for meeting Regional priorities, goals, and objectives. Attendees included nearly 140 State representatives, more than 90 conservation group representatives, more than 40 business people, and about 30 representatives from Tribes and other Federal agencies.

USGS mapped spawning habitat of lake trout in Lake Huron and yellow perch in Lake Michigan using a remotely operated underwater vehicle with a side scan sonar closed-circuit TV system, geographic positioning system, and computer based GIS. The maps were needed to implement fishery management actions as part of the Great Lakes fishery restoration and management efforts.

EPA produced the *Catalog of Federal Funding Sources for Watershed Protection.* The catalog contains information on 52 funding sources (grants and loans) for watershed protection projects.



Federal agencies are working together to restore the nation's trout and salmon fisheries

Implementation of the Recreational Fishing/ Endangered Species Act (ESA) Policy.

In 1996, as required by the E.O., the USFWS and NMFS developed a joint policy to resolve conflicts between recreational fisheries and administration of the ESA. Highlights of the actions taken by each agency in FY 1997 to implement the policy are listed below for each agency.

NMFS Accomplishments

NMFS and the USFWS withdrew their joint proposed rule to list Atlantic salmon in Maine, December 18, 1997, allowing the State of Maine to take the lead in conserving this species by implementing its Atlantic Salmon Conservation Plan. The State of Maine will permit recreational fishing under a catch and release regime, provided that the populations are determined to be able to sustain incidental hooking mortality. Had the Services listed the species as threatened, a directed recreational fishery would have been difficult to justify.

NMFS continues to work closely with the USFWS and the Maine Atlantic Salmon Authority to implement the Maine Atlantic Salmon Conservation Plan. Successful implementation of this interagency plan will preclude the need to list any stocks of Atlantic salmon in the State of Maine as either threatened or endangered. The cooperative recovery effort includes State, Federal, and private programs and is only the second of its kind in the nation approved for fish species. It includes continuing broodstock development and stocking of Atlantic salmon in rivers, upland habitat improvement, construction of fish weirs on some rivers, changes in both aquaculture and agriculture operations to reduce their threats to salmon survival, and continue monitoring and research programs to evaluate and improve progress. The plan also provides for an integrated program of population monitoring and regulated catch and release fishing.

NMFS issued a biological opinion on the issuance of a Section 10 incidental take permit to Idaho to authorize a recreational fishery for chinook salmon in the Snake River basin.

NMFS negotiated a comprehensive plan with the State of Oregon (the Oregon Coastal Salmon Restoration Initiative) which provides much of the protection that otherwise would have been required of the Federal Government under provisions of the ESA. Key provisions of the plan were designed to provide greater protection for naturally-produced fish while preserving recreational fisheries targeting hatchery fish. Oregon adopted a model salmon management plan that will allow expansion of recreational fisheries as listed and candidate populations of coho increase toward full recovery. Increasing harvest will be allowed with demonstrated increases in ocean survival and wild fish escapements.

NMFS facilitated an excellent fishery in Idaho due to a "bumper crop" of hatchery spring/summer chinook while protecting wild populations listed as threatened under the ESA. Production of unlisted hatchery populations provided for a carefully regulated sportfishery targeting on marked, hatchery fish.

NMFS is working with the States of Oregon, Washington, and Idaho to develop detailed Recreational Fishery Management and Evaluation Plans (RFMEP), which, in conjunction with special conditions developed in a draft Section 4(d) rule and MOUs between NMFS and the States, will allow continued fishing for hatchery-produced steelhead in waters where threatened steelhead exist (i.e., Snake River basin). Management plans will attempt to identify strategies that allow recreational fisheries to target unlisted, hatchery fish in a manner that is compatible with protection and recovery of listed, wild populations. Protective measures apply both to adult and juvenile steelhead which are subject to harvest in stream-based trout fisheries. The principles and management measures developed as part of the RFMEPs have also been applied to negotiations regarding candidate Evolutionarily Significant Units in Oregon, Washington and California, in some cases as features in conservation plans that could defer ESA listing.

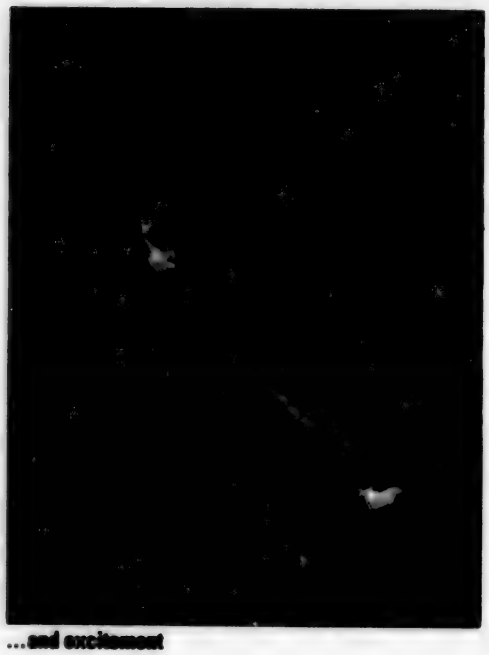
NMFS participated in an interagency collaborative effort to resolve difficult water and flood management issues in the Guadalupe River watershed (habitat for steelhead and chinook near San Jose, California). The group hopes to resolve mitigation requirements for a 100-yr. flood protection project planned by the ACE for the downtown area, develop a channel management plan that provides adequate flows, temperatures, and riparian habitat for salmon and other ecosystem components, and ensures long-term compliance with the ESA, possibly through development of a habitat conservation plan.

NMFS performed numerous formal and informal consultations under the ESA with both the private and public sectors pertaining to potential projects that may impact listed salmon and steelhead and their habitat.

NMFS consulted with the USFWS on assessments of the expected impacts of 1997 Snake River basin tributary fisheries on threatened and endangered Snake River salmon species and the expected impacts of October 1997 through January 1998 fall and winter season mainstem and tributary fisheries on the listed Columbia River steelhead. These favorable reviews are essential for the continuation of any recreational fisheries affecting the listed stocks.

NMFS and the USFWS continue to provide fish health certification and diagnostic services for captive broodstock efforts with the Red Fish Lake sockeye.

Fishing provides tranquility...



...and excitement

USFWS Accomplishments

Upper Columbia River Basin Field Office provided technical assistance to 280 landowners for stream enhancement projects, completed 10 stream restoration projects, rehabilitating over 15 miles of stream channel, and provided technical assistance to BOR on fisheries issues such as fish passage and habitat restoration for listed and non-listed species.

Lahontan National Fish Hatchery worked with States, Tribes and Federal agencies to expand the role of the threatened native Lahontan cutthroat trout in recreational fishing programs and reduce the presence of non-native trout that compete with Lahontan cutthroats. They also worked to restore the Truckee River habitat for recreational fisheries. They produced over 200,000 Lahontan cutthroat trout for recreational fishing and public education programs.

USFWS is reintroducing coaster brook trout and lake sturgeon to key locations in the Great Lakes. This work will create a world class brook trout fishery and bring a once recreationally valuable, but now candidate endangered species back from the brink of extinction.

In cooperation with Colorado, Utah, and Wyoming the USFWS has adopted nonnative stocking procedures for the upper Colorado River Basin. Nonnative fish stocked for sportfishing had been identified as a threat to fish listed under the ESA. The agreement prohibits stocking of certain warmwater sportfish in ponds occurring within the 100 year floodplain of the Colorado River and specifies when and where such fish can be stocked. The USFWS agreed to raise and stock up to 40,000 catchable sized rainbow trout or cutthroat trout to create seasonal recreational fisheries to offset recreational fishing opportunities that would be lost under the prohibitions of the agreement.

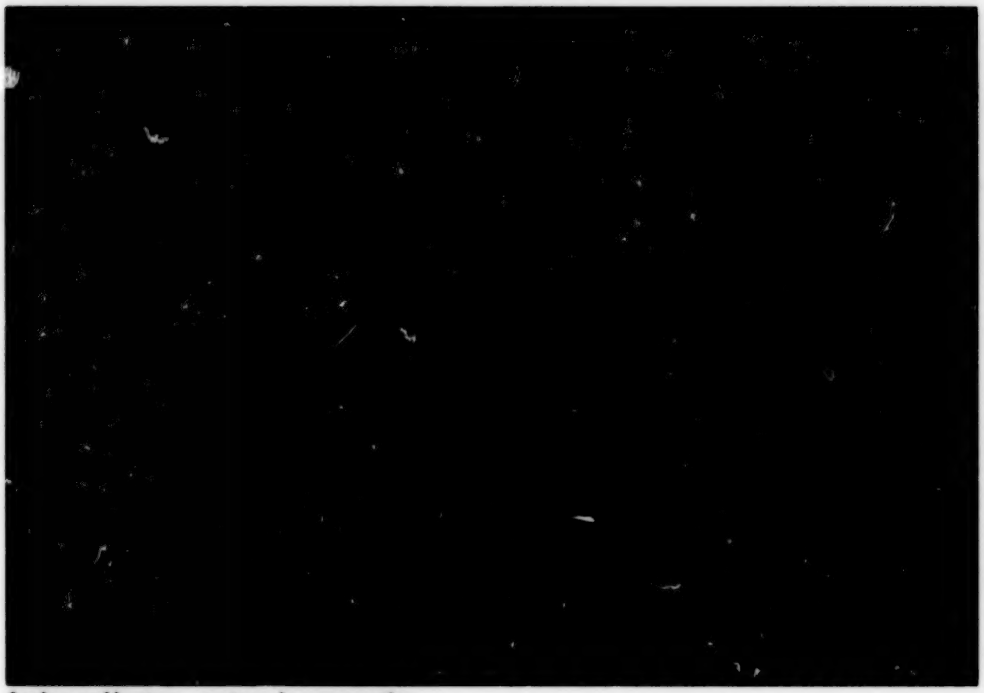
During the past 8 years, efforts to restore the threatened Greenback cutthroat trout included removal of nonnative trout, thereby eliminating fisheries in 19 streams. To offset lost recreational fishing due to the recovery program, the USFWS provided recreational fishing opportunities by creating fisheries on DOD and NPS waters using hatchery reared greenbacks. These opportunities were accompanied by education and interpretation outreach to explain the past plight and bright future for the recovery of this salmonid.

USFWS, in cooperation with other Federal agencies, the State of Alaska, Tribes, and private entities have prevented conflicts between recreational fisheries and the 22 listed or proposed species in Alaska. Through the USFWS efforts, nearly 500,000 anglers fished 2.7 million days and caught 6.3 million fish in Alaska during 1997 without any conflicts over implementation of the ESA.

The National Fish Hatchery System contributed to the recovery of 29 fish species listed under the ESA, thereby helping to restore and maintain recreational fishery opportunities.

In 1997, the USFWS decided to use mass marking of hatchery fish as a means of providing harvest opportunities for surplus hatchery stocks while providing a measure of protection for depressed wild stocks in the Columbia River Basin. Mass marking at Eagle Creek and Willard National Fish Hatcheries in conjunction with selective fisheries using gear and techniques that result in low mortality of non-retained fish will help maintain a reasonable level of recreational harvest even though wild runs are depressed. Hatchery steelhead at USFWS hatcheries in the Columbia River basin have been mass marked for over ten years. This program has provided substantial recreational fishery opportunities for steelhead throughout the basin.

USFWS continued work on mass marking and selective fisheries issues related to coho salmon. These efforts should increase recreational fishing opportunities for coho salmon while lessening impacts to wild stocks which may be listed or proposed for listing under the ESA. In 1997, the USFWS began mass marking coho salmon production at Quilcene and Makah National Fish Hatcheries, and double-index tagged coho salmon at Quinault National Fish Hatchery for selective fishery evaluation, pending agreement with the Quinault Nation regarding mass marking all of the Quinault



Anglers and boaters...partners in conservation

National Fish Hatchery coho salmon. Mass marking will permit selective harvest of hatchery fish in recreational fisheries and reduce catches of co-mingled wild fish.

The Lower Snake River Compensation Plan Office program manages one of the USFWS's largest salmon, steelhead, and resident rainbow trout production programs and has undertaken considerable changes in its mitigation program to accommodate its responsibilities for mitigation, recreational fishing, and the administration of the ESA. Non-endemic stocks previously used for mitigation are being replaced with locally adapted stocks to reduce impacts on listed salmon and steelhead. A captive broodstock programs with listed endemic stocks has been initiated as a gene conservation program to assist in recovery and provide a local stock that will not be in conflict with listed stocks. Many of the stocks utilized for mitigation programs are considered reserve stocks. These unlisted reserve stocks represent an Evolutionarily Significant Unit for the species and can be used for recovery purposes if needed.

In cooperation with BLM, BOR, and the States of California and Arizona, the USFWS continues to implement the Lake Havasu Fisheries Improvement Program. This program has provided millions of dollars to enhance habitat for sportfish while reducing potential conflicts with razorback sucker and bonytail chub recovery through consultation and communication among the partners.

NATIONAL RECREATIONAL FISHERIES COORDINATION COUNCIL

US Army Corps of Engineers

NATIONAL RECREATIONAL FISHERIES COORDINATION COUNCIL

Army Corps of Engineers

Bureau of Indian Affairs

Bureau of Land Management

Bureau of Reclamation

Bonneville Power Administration

Department of Commerce

Department of Defense

Endangered Species Act

Federal Energy Regulatory Commission

International Association of Fish and Wildlife Agencies

Memorandum of Understanding

National Marine Fisheries Service

National Oceanic and Atmospheric Administration

National Park Service

Natural Resources Conservation Service

National Recreational Fisheries Coordination Council

Southwest Power Administration

Tennessee Valley Authority

U.S. Forest Service

U.S. Environmental Protection Agency

U.S. Air Force

U.S. Army

U.S. Coast Guard

U.S. Department of Agriculture

U.S. Geological Survey

U.S. Fish & Wildlife Service

U.S. Navy

END

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